ABSTRACT OF THE DISCLOSURE

A code generation system is provided which optimizes a code generation for a control system applicable to an embedded control system without the need to increase its memory capacity. A total control unit 110 causes to read a model diagram and an operation diagram which depict a software specification stored in a memory 104, and starts specification analysis unit 106 to execute lexical and grammatical analyses thereof. Then, object-oriented function removing unit 107 is started to determine any function which is not used according to a function select item stored in the memory 104. Then, code generation unit 108 is started to generate a code on the basis of the result of the lexical and grammatical analyses of the software specification, and of an output code pattern determined by the object-oriented function removing unit 107.